

Digital Single-Day Maximum and Minimum Temperature Protocol

Field Guide

Task

Measure the current, maximum, and minimum air temperatures from the digital single-day thermometer.

Measure the current, maximum, and minimum soil temperatures from the digital single-day thermometer (optional).

Reset the digital thermometer to start the next 24-hour measurement.

What You Need

- ☐ A properly sited instrument shelter
- ☐ A properly calibrated and installed digital single-day max/min thermometer
- ☐ An accurate watch or other device that tells time
- ☐ An appropriate *Data Sheet*
- ☐ Pen or pencil

Note: Make sure that the digital thermometer is reading in Celsius units. If it is not, press the °C/°F button to switch to Celsius units.

In the Field

1. Within an hour of local solar noon, open the instrument shelter being careful not to breathe on the thermometer.
2. Record the time and date on your *Data Sheet* in both local and UT time. **Note:** GLOBE Web site entry should be UT time.
3. Make sure that your thermometer is displaying the current temperature(s) (Neither 'MAX' or 'MIN' symbols should be displayed on the screen. If they are, press the MAX/MIN button until they disappear).
4. Record the current air temperature on your *Data Sheet*. If you are taking soil readings, also record the soil temperature.
5. Press the MAX/MIN button once.
6. Maximum temperature reading(s) will now be displayed along with the 'MAX' symbol on the display screen.
7. Record the maximum air temperature on your *Data Sheet*. If you are taking soil readings, also record the maximum soil temperature.
8. Press the MAX/MIN button a second time.
9. Minimum temperature reading(s) will now be displayed along with the 'MIN' symbol on the display screen.
10. Record the minimum air temperature on your data sheet. If you are taking soil readings, also record the minimum soil temperature.
11. Press and hold the MAX/MIN button for one second. This will reset your thermometer.
12. Close the instrument shelter.